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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/717,797 | 11/19/2003 | Amir Abolfathi | AT-000218 US | 8590 |

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| EXAMINER | |
|---|---|
| O'CONNOR, CARY E | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3732 | |

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/717,797 | ABOLFATHI ET AL | |
| | Examiner | Art Unit | |
| | Cary E. O'Connor | 3732 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 October 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *111904,81104*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the detachable portion" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coscina (3,878,610) in view of Chartrand (2,426,388). Coscina shows a dental tray 10 comprising a base 26 having a plurality of prongs, a first wall 28 extending from one side of the base, an at least one tearable portion formed on one end of one prong, the detachable portion being removable to shorten the prong length (see column 7, lines 36+). The tray of Coscina does not include openings in the base or walls. Chartrand shows a dental impression tray having openings 10 in the base and walls to secure the impression material in the tray when it is removed from the mouth (column 3, lines 33-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the base and wall of Coscina with opening therethrough,

in view of Chartrand, in order to provide a means for holding the impression material in the tray upon removal of the tray from the mouth. As to claims 2 and 3, note that the detachable portion and the first wall are curved to eliminate sharp edges and corners, as can be seen in Figures 2 and 7. As to claim 7, note that the tray of Coscina includes a second wall which has openings therethrough. As to claims 9 and 14, note that the tray of Chartrand may be made of lead (column 3, last line), which is inherently radiopaque, as evidenced by Chandra (5,935,638) in column 3, lines 57-62. It would have been obvious to one of ordinary skill in the art to form the tray of Coscina from lead, in view of Chartrand, because it is considered an art equivalent material for impression trays. As to claims 10 and 11, the prongs are interconnected by an arcuate portion which includes a plurality of openings therethrough. As to claim 12, the tray is considered to be capable of being positioned in a radiographic scanner and it has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). As to claim 13, note that Coscina may comprise a system which includes upper and lower dental trays (column 3, lines 15-39).

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chartand (2,426,388) in view of Halverson et al (4,763,791). Chartrand appears to

show only a lower tray. Halverson shows an impression kit having both upper and lower trays. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tray of Chartrand in kit form comprising both upper and lower trays, in view of Halverson, because usually impressions are needed for both the upper and lower jaws. As to claim 18, Halverson also includes a container for holding the trays. It would have also been obvious to one of ordinary skill in the art to provide the system with a container so that all the components needed to take an impression are stored together and easily accessible. As to claims 19 and 20, the specific components of the scanner cannot be given patentable weight because the scanner is not positively claimed.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791) as applied to claim 18 above, and further in view of Bublewitz et al (2002/0156186). Chartrand does not disclose the specific composition of the impression material. Bublewitz discloses an impression material comprising a radiopaque material (paragraph 0112) and PVS (paragraph 0109). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an impression material containing a radiopaque material and PVS, as taught by Bublewitz, in the impression tray of Chartrand, so that the impression may be scanned to form a digital model of the mouth.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791) and Bublewitz et al (2002/0156186) as applied to claim 21 above, and further in view of Jagmin

(5,044,955). The radiopaque material of Bublewitz is mixed in the impression material, not coated on the surface. Jagmin teaches that a radiopaque material may be sprayed on a surface to make the surface more visible to X-ray (column 4, lines 11-25). It would have been obvious to spray a radiopaque layer on the impression formed by the impression tray of Chartrand, in view of Jagmin, so that a common impression material may be used and the impression can be made visible to a scanner if so desired.

***Drawings***

The corrected or substitute drawings were received on October 18, 2004. These drawings are approved.

***Response to Arguments***

Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed October 18, 2004 have been fully considered but they are not persuasive. In response to applicant's argument (claims 18-20) that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Chartrand fails to show the tearable portion) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As to the rejection of claims 21-23, applicant argue that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation has been set forth as "so that the impression may be scanned to form a digital model of the mouth". Further, applicant argues that the Examiner's rejection fails to meet all the claim limitation, but applicant has not set forth how the rejection fails this test.

As to the rejection of claim 24, applicant argue that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation has been set forth as "so that a common impression material may be used and the impression can be made visible to a scanner if so desired". Further, applicant argues that the Examiner's rejection fails to meet all the claim limitation, but applicant has not set forth how the rejection fails this test.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 703-308-2701. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 703-308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cary E. O'Connor
Primary Examiner
Art Unit 3732

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